Commonwealth of Kentucky
Division for Air Quality

EXECUTIVE SUMMARY

FINAL
TITLE V- RENEWAL OPERATING PERMIT NO. V-07-032
SGL CARBON, LLC
HICKMAN KY.
APRIL 9, 2008
LUIS D. FUENTES, REVIEWER

SOURCE ID:	021-075-00001
AGENCY INTEREST:	1440
ACTIVITY:	APE20070001

SOURCE DESCRIPTION:

SGL Carbon, LLC, hereafter "SGL Carbon", located in Hickman, Kentucky, is a graphite electrode manufacturing facility. This operation is classified under the Kentucky Division for Air Quality (DAQ) proposed regulation 401 KAR Chapter 52 as a "major source" of air emissions. Currently, SGL Carbon is operating in accordance with Title V Permit V-01-023 R1 issued June 6, 2005.

The primary activity of SGL Carbon's Hickman, Kentucky plant is the manufacturing of carbon graphite electrodes. This process consists of milling, mixing and extruding petroleum coke to make green electrodes that are then shipped to outside plants for completion.

The raw material petroleum coke is weighed, sized, and pneumatically conveyed to a mixer/cooler pre-heater where it is heated and dropped into the mixer and homogenized. Liquid coal tar pitch and other additives are added to the mixer and blended until the desired target temperature is reached. Once temperature has been attained, a predetermined amount of water is added to reduce the hot mix to the desired extrusion temperature. After water addition, the cooled mix is then dropped to a press to be extruded. The finished carbon graphite electrodes are then ready to be shipped to other facilities for further processing.

In addition to producing green electrodes, a ring bake furnace at the plant allows the facility to bake the green electrodes on site. Following ring furnace baking, the baked electrodes are then cleaned and shipped to other sites for use.

U.S. EPA REVIEW:

The U.S. EPA was notified of the issuance of the proposed permit on February 22, 2008 via e-mail. The comment period expired 45 days from the date of e-mail. No comments were received during this period. The permit is now being issued final.